UNITED STATES PATENT AND TRADEMARK OFFICE

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/015,801	12/17/2001	Ann M. Wollrath	06502.0054-01	1256

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EXAMINER
FLEURANTIN, JEAN B

ART UNIT	PAPER NUMBER
2172	12

DATE MAILED: 05/22/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

PTO-90C (Rev. 07-01)

Office Action Summary	Application No.	Applicant(s)
	10/015,801	WOLLRATH ET AL.
	Examiner	Art Unit
	Jean B Fleurantin	2172

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE <u>3</u> MONTH(S) FROM
THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on <u>10 February 2003</u> .

2a)☐ This action is **FINAL**.   2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) <u>5-9, 14-15 and 16-22</u> is/are pending in the application.

   4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) <u>5-9, 14-15 and 16-22</u> is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

   Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

11)☐ The proposed drawing correction filed on _____ is: a)☐ approved b)☐ disapproved by the Examiner.

   If approved, corrected drawings are required in reply to this Office action.

12)☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

13)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

   a)☐ All b)☐ Some * c)☐ None of:

   1.☐ Certified copies of the priority documents have been received.

   2.☐ Certified copies of the priority documents have been received in Application No. _____ .

   3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

   * See the attached detailed Office action for a list of the certified copies not received.

14)☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).

   a) ☐ The translation of the foreign language provisional application has been received.

15)☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) <u>11</u> .
4) ☐ Interview Summary (PTO-413) Paper No(s). _____ .
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: .

DETAILED ACTION

Response to Amendment

1.   Claims 5-9, 14-15 and 16-22 are remained pending for examination.

Information Disclosure Statement

2.   The references cited in the IDS, PTO-1449 have been fully considered.

Response to Applicant' Remarks

3.   Applicant's arguments submitted on 02/10/2003 with respect to claims 5-9, 4-15

and 16-22 have been considered but, have been found persuasive only to the extent that

the prior art of record does not specifically teach the limitations "a second virtual

machine executing a process that receives." However, Ohtsuki teaches such limitations.

And the limitations of claims 14-15 and 16-22 are discussed in the following action.

Claim Rejections - 35 USC § 102

4.   The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that

form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (e) the invention was described in a patent granted on an application for patent by another filed in the United States before the invention thereof by the applicant for patent, or on an international application by another who has fulfilled the requirements of paragraphs (1), (2), and (4) of section 371(c) of this title before the invention thereof by the applicant for patent.

The changes made to 35 U.S.C. 102(e) by the American Inventors Protection Act

of 1999 (AIPA) and the Intellectual Property and High Technology Technical

Amendments Act of 2002 do not apply when the reference is a U.S. patent resulting

directly or indirectly from an international application filed before November 29, 2000.

Therefore, the prior art date of the reference is determined under 35 U.S.C. 102(e) prior

to the amendment by the AIPA (pre-AIPA 35 U.S.C. 102(e)).

Claim 19 is rejected under 35 U.S.C. 102(e) as being anticipated by

Marchesseault (US Pat. No. 6,343,308)("Marchesseault").

As per claim 19, Marchesseault teaches a method for executing computer code in

a distributed computer system as claimed, comprises receiving a registration of interest in

an event, the registration including computer code (thus, a computer usable medium

having first computer readable program code means embodied in said medium for

downloading the applet to the client wherein the applet includes each object class called

within the applet, the computer usable medium having second computer readable

program code means embodied in said medium for downloading to the client a class

interface having at least one respective; identifier for the object class associated with the

second Java version of the Java Virtual Machine called by the applet; which is equivalent

to for executing computer code in a distributed computer system as claimed, comprises

receiving a registration of interest in an event, the registration including computer code)

(see colt 14, lines 23-32); transmitting a message including the computer code in

response to the event (thus, sending a request to activate the applet from the client to a

server hosting the applet; which is equivalent to transmitting a message including the

computer code in response to the event)(see colt 12, lines 20-22); and executing the

computer code transmitted in the message (thus, sending a request to activate the applet

from the client to a server hosting the applet; which is readable as executing the computer

code transmitted in the message)(see colt 12, lines 20-22). Further, in column 4, lines

27-29, Marchesseault teaches the loader performs validity verification by parsing through

the code of each downloaded class and verifying that methods called therewithin arc

available.

Claim Rejections - 35 USC § 103

5.   The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all

obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set
> forth in section 102 of this title, if the differences between the subject matter sought to be patented and
> the prior art are such that the subject matter as a whole would have been obvious at the time the
> invention was made to a person having ordinary skill in the art to which said subject matter pertains.
> Patentability shall not be negatived by the manner in which the invention was made.

Claims 5-9, 14, 15, 16-18 and 20-22 are rejected under 35 U.S.C. 103(a) as being

unpatentable over Marchesseault (US Pat. No. 6,343,308) in view of Ohtsuki (US Pat.

No. 5,101,346) ("Marchesseault"), ("Ohtsuki").

As per claims 5, 18 and 20, Marchesseault teaches a distributed computer system,

as claimed comprises a first virtual machine (thus, a first Java version of a Java Virtual

Machine running on a client, which is equivalent to a first virtual machine)(see col. 2,

lines 25-26); from the first machine, a registration of interest in an event and transmits a

message in response to the event, the registration of interest and the message including

computer code (thus, a computer usable medium having first computer readable program

code means embodied in said medium for downloading the applet to the client wherein

the applet includes each object class called within the applet, the computer usable

medium having second computer readable program code means embodied in said

medium for downloading to the client ,a class interface having at least one respective

identifier for the object class associated with the second Java version of the Java Virtual

Machine called by the applet; which is readable as a registration of interest in an event

and transmits a message in response to the event, the registration of interest and the
message including computer code)(see col. 14, lines 23-32). Further, in column 4, lines
27-29, Marchesseault teaches the loader performs validity verification by parsing through
the code of each downloaded class and verifying that methods called therewithin are
available. But, Marchesseault does not explicitly indicate a second virtual machine
executing a process that receives; and a third virtual machine. However, Ohtsuki
implicitly indicates an information processing system which includes of real instruction
processors and a main storage allocated to several virtual machines in such a manner that
a virtual machine system thus implemented comprises a plurality of virtual machines
each including the same number of instruction processors as that of the real instruction
processor(s) assigned theretowith the main storages of the individual virtual machines
incuding consecutive storage regions of the real main storage allocated to the virtual
machines; which is readable as a second virtual machine executing a process that
receives; and a third virtual machine, (see col. 2, lines 11-26). Further, in column 5, lines
2-4, Marchesseault teaches the registration table 14 in which correspondences between
the instruction processors of the individual virtual machines. Thus, it would have been
obvious to one ordinary skill in the art at the time the invention was made to modify the
teachings of Marchesseault and Ohtsuki with a second virtual machine for receiving the
message and executing the computer processor. This modification would allow the
teachings of Marchesseault and Ohtsuki to improve the accuracy and the reliability of the
method and apparatus for transporting behavior in an event based distribution system,
and provide a plurality of operating systems to run on an information processing system
(see col. 1, lines 11-13).

As per claims 6 and 7, Marchesseault teaches the subject matter except wherein the message transmitted by the second virtual machine. However teaches Ohtsuki teaches an information processing system which includes of real instruction processors and a main storage allocated to several virtual machines in such a manner that a virtual machine system thus implemented comprises a plurality of virtual machines each including the same number of instruction processors as that of the real instruction processor(s) assigned theretowith the main storages of the individual virtual machines including consecutive storage regions of the real main storage allocated to the virtual machines; which is readable as except wherein the message transmitted by the second virtual machine, (see col. 2, lines 11-26). Further, in column 5, lines 2-4, Marchesseault teaches the registration table 14 in which correspondences between the instruction processors of the individual virtual machines. Thus, it would have been obvious to one ordinary skill in the art at the time the invention was made to modify the teachings of Marchesseault and Ohtsuki with wherein the message transmitted by the second virtual machine. This modification would allow the teachings of Marchesseault and Ohtsuki to improve the accuracy and the reliability of the method and apparatus for transporting behavior in an event based distribution system, and provide a plurality of operating systems to run on an information processing system (see col. 1, lines 11-13).

As per claim 8, Marchesseault teaches a distributed computer system as claimed, wherein each said virtual machine is stored a separate computer system (thus, a method

of executing an applet within a first Java version of a Java Virtual Machine running on a client, which is equivalent to virtual machine is stored a separate computer system)(see col. 11, lines 66-67).

As per claim 9, Marchesseault teaches a distributed computer system as claimed, wherein the computer is implemented in an object (thus, wherein the application includes at least one call to an object class of a second version of the runtime system, which is equivalent to computer is implemented, in an object)(see col. 2, lines 4-6).

As per claim 14, Marchesseault teaches a distributed computer system as claimed, wherein the event includes a change in the system state (thus, at least one call to a second java version object class; which is equivalent to wherein the event includes a change in the system state)(see col. 2, lines 26-2',7).

As per claim 15, Marchesseault teaches a distributed computer system as claimed, wherein the event includes one selected from the group consisting of a timer event, a mouse click event, and a disk access event (see col. 3, lines 27-35).

As per claims 16, the limitations of claim 16 are rejected in the analysis of claim 1, and this claim is rejected on that basis.

As per claims 17, the limitations of claim 17 are rejected in the analysis of claim 1, and this claim is rejected on that basis.

As per claim 21, in addition to the discussion in claim 5, Marchesseault further teaches a message including a registration object characterized as an object having closure (thus, wherein the application includes at least one call to an object class of a second version of the runtime system; which is equivalent to a message including a registration object characterized as an object having closure)(see col. 2, lines 4-6);

whereby the first the first entity is not aware of functions available to the entity provided

with the notification due to the disclosure of the registration object (thus, each

downloaded second Java version object class is identified by the loader within the Java

Virtual Machine, the existence in the class interface of a respective identifier for each

downloaded second Java version object class is verified, the downloaded applet is then

executed within the Java Virtual Machine without causing error conditions by any calls to

second Java version object classes having a respective identifier in the class interface,

calls to second Java version object classes not identified within the downloaded class

interface are not allowed; which is readable as whereby the first the first entity is not

aware of functions available to the entity provided with the notification due to the

disclosure of the registration object (thus, each downloaded second Java version object

class is identified by the loader within the Java Virtual Machine the existence in the class

interface of a respective identifier for each downloaded second Java version object class

is verified, the downloaded applet is then executed within the Java Virtual Machine

without causing error conditions by any calls to second Java version object classes having

a respective identifier in the class interface, calls to second Java version object classes not

identified within the downloaded class interface are not allowed)(see col. 2, lines 36-45).

As per claim 22, in addition to the discussion in claim 5, Marchesseault further

teaches the event registration message further includes event information identifying the

event of interest and software information identifying a software entity to be notified

upon occurrence of the event (thus, verifying that each identified object class associated

with the second Java version of the Java Virtual Machine has a respective identifier in the

class interface; which is readable as event information identifying the event of interest

and software information identifying a software entity to be notified upon occurrence of the event)(see col. 14, lines 4-7), and

upon occurrence of the event, the method and parameter data execute to pass at least one of the computer object and reference to the computer object to the software entity (thus, methods, systems and computer program products for executing an applet within a first Java version of a Java Virtual Machine running on a client, wherein the applet includes at least one call to a second Java version object class, are provided, a request to activate an applet is made to a server hosting the applet from a client; which is readable as upon occurrence of the event, the method and parameter data execute to pass at least one of the computer object and reference to the computer object to the software entity)(see col. 2, lines 24-29).

Conclusion

6.   Any inquiry concerning this communication from examiner should be directed to Jean Bolte Fleurantin at (703) 308-6718. The examiner can normally be reached on Monday through Friday from 7:30 A.M. to 6:00 P.M.

If any attempt to reach the examiner by telephone is unsuccessful, the examiner's supervisor, Mrs. KIM VU can be reached at (703) 305-8449. The FAX phone numbers for the Group 2100 Customer Service Center are: After Final (703) 746-7238, Official (703) 746-7239, and Non-Official (70.3) 746-7240. NOTE: Documents transmitted by facsimile will be entered as official documents on the file wrapper unless clearly marked "DRAFT".
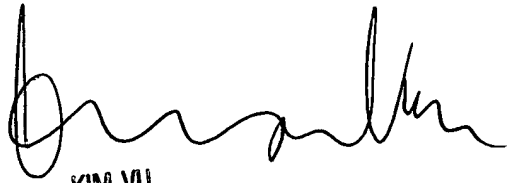
Any inquiry of a general nature or relating to the status of this application or

proceeding should be directed to the Group 2100 Customer Service Center receptionist

whose telephone numbers are (703) 306-5631, (703) 306-5632, (703) 306-5633.

Jean Bolte Fleurantin

2003-05-16

JBF/

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